

3X Systems Remote Backup Appliance – Best Practices

The following are provided to optimize your experience with the 3X RBA.

General

1. As with most mission-critical equipment, we strongly suggest you use a UPS to provide power to the Remote Backup Appliance.
2. Save a copy of the encryption key in a safe place (in the Manager, go to Administration – System Settings – Encryption Key and click “Download Key”).
3. Backups are always transmitted using SSL encryption. Using on-disk encryption and/or compression will decrease performance to some degree.

Backups - General

1. Remember, you can apply more than one backup set to a particular PC or server. This can often make for more efficient backups.
2. Break up your backup sets by creating separate backup sets for each drive in a multi-drive system for example, so that you can monitor the files that are being backed up more easily. This will make it easier to fine tune your selection criteria.
3. Create a separate backup set for System State if you are also backing it up.
4. When creating a schedule, give it a descriptive name (“Daily at 11:30pm”) so it can readily be reused if needed.

Backups - Performance

1. Backups can be most effectively carried out when bandwidth is most available, and where the computer being backed up is under least use.
2. Perform the first (“seed”) backup on the same network as the device(s) being backed up. This will provide the best speed advantage. If you anticipate backing up a lot of data at once (100GB+), you may consider creating your seed over the weekend.
3. If you are using SQLs own backup feature to create a daily file to be backed up by the 3X RBA, consider using the same filename for the file each time. Otherwise, the RBA will not transmit just the smaller “delta” file change, but will need to retransmit the whole new daily backup file. You still have the ability to restore the entire file from any daily backup.
4. Carefully consider what you are backing up and which folders or file types are included in your backup set rules. Only include folders with necessary data in your selection rules. If not properly selected, this can be the primary source of backup issues that clog up the network and waste your backup storage, potentially affecting the timely backup of your mission critical data. See bullet point 5 for examples, or [“Rule Based Backup Sets”](#) for a more detailed explanation.

5. Use filtering to exclude Temporary folders or other junk folders from being backed up. Here are some examples you can exclude in globally in a backup set (see "Rule Based Backup Set" doc for specifics) :
 - a. Exclude (full path match) `***\temp\` Use this filter on the root of your drive selection such as C:\ to exclude any path with a folder name "temp". e.g. C:\temp\ or C:\windows\temp\.
 - b. Exclude (full path match) `***\temporary Internet*` Use this filter on the root of your drive selection such as C:\ to exclude thousands of temporary browser files.
 - c. Similarly, exclude (full path match) `***\cookies*` to exclude any cookie files.
 - d. Exclude unnecessary files such as *.tmp from your backup sets.
 - e. Explicitly exclude folders such as "Recycler", "System Volume Information" from your backup set to avoid backing unnecessary files.
 - f. If you are backing up Windows Operating System files, pay close attention to making sure that you backup only necessary files needed for your system rebuild.
 - g. Exclude files such as Symantec virus definition files that are updated frequently to avoid unnecessary transmission of files to your backup appliance. Keep the changes to file selection rules to a minimum.
6. Every time you make a change to a backup set selection rules, the system has to perform a baseline backup. Although a baseline backup does NOT retransmit the file already backed up to the appliance, this process could be time consuming as it has to traverse your file system to update the snapshot set information.
7. If you have limited bandwidth to remote locations, consider staggering backups so all six workstations don't start to back up at the same time, for instance.
8. If you are backing up folders where a lot of data changes each day, these can take longer as you lose some of the benefit of de-duplication. After creating a seed backup, examine subsequent backups to see how long they run so you can better manage your backup schedules.